

B. AMENDMENT OF APPLICATION

In the Claims: (strikethrough parts deleted and underlined parts added)

Please delete Claims 5-9, 14-16, 18, 22-38 without prejudice.

1. (Currently Amended) An input/output transition board system for transferring data between an I/O board and a backplane board, comprising:

an I/O board having at least one I/O connector and at least one front I/O connector;

a transition board having at least one rear connector connectable to said at least one front I/O connector and at least one front connector; and

a backplane board having at least one rear backplane connector connectable to said at least one front connector;

an enclosure capable of receiving said I/O board, said transition board and said backplane board, wherein said enclosure is comprised of a spray cooling system;

wherein said enclosure is sealed;

wherein said transition board manipulates data being transferred between said I/O board and said backplane board;

wherein said transition board includes at least one electronic device;

wherein said transition board is active;

wherein said backplane board has at least one socket;

wherein said at least one socket is on a side opposite of said at least one rear backplane connector;

wherein said at least one socket is in communication with said at least one rear backplane connector;

wherein said I/O board is attachable to an interior surface of an enclosure;

wherein said at least one I/O connector is extendable through a corresponding opening within said enclosure;

wherein said at least I/O connector is hermetic.

2. (Original) The input/output transition board system of Claim 1, wherein said transition board is distally spaced a distance from said backplane board when said at least one rear backplane connector is connected to said at least one front connector.

3. (Original) The input/output transition board system of Claim 2, wherein said distance is at least about 0.4 inches.

4. (Original) The input/output transition board system of Claim 2, wherein said distance is between about 0.4 to 1.0 inch.

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Currently Amended) The input/output transition board system of Claim 1 ~~Claim 9~~, wherein said rear backplane connector is comprised of a rear panel connector.

11. (Original) The input/output transition board system of Claim 1, wherein said transition board is distally spaced a distance from said I/O board when said at least one front I/O connector is connected to said at least one rear connector.

12. (Original) The input/output transition board system of Claim 11, wherein said distance is at least about 0.4 inches.

13. (Original) The input/output transition board system of Claim 11, wherein said distance is between about 0.4 to 1.0 inch.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Original) The input/output transition board system of Claim 1, wherein said at least I/O connector includes at least about 250 electrical conductors.

18. (Canceled)

19. (Original) The input/output transition board system of Claim 1, wherein said I/O board, said transition board and said backplane board are substantially parallel to one another.

20. (Original) The input/output transition board system of Claim 1, including at least one first auxiliary connector connected to said backplane board and a first auxiliary board connectable to said auxiliary connector.

21. (Original) The input/output transition board system of Claim 20, including at least one second auxiliary connector connected to said first auxiliary board and a second auxiliary board connectable to said second auxiliary connector.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

- 27. (Canceled)
- 28. (Canceled)
- 29. (Canceled)
- 30. (Canceled)
- 31. (Canceled)
- 32. (Canceled)
- 33. (Canceled)
- 34. (Canceled)
- 35. (Canceled)
- 36. (Canceled)
- 37. (Canceled)
- 38. (Canceled)

Please add the following claims:

39. (New) An input/output transition board system for actively transferring data between an I/O board and a backplane board, comprising:

an I/O board having at least one I/O connector and at least one first connector;

a transition board having at least one second connector connected to said at least one first connector and at least one third connector, wherein said transition board is active;

at least one electronic device connected to said transition board;

a backplane board having at least one fourth connector connected to said at least one third connector, wherein said backplane board has at least one socket capable of receiving at least one card;

wherein said I/O board, said transition board and said backplane board are substantially parallel to one another; and

an enclosure surrounding said I/O board, said transition board and said backplane board, wherein said at least one I/O connector extends through a wall of said enclosure, wherein said I/O board is at least near an inner surface of said enclosure;

wherein said transition board is distally spaced a first distance from said backplane board when said at least one fourth connector is connected to said at least one third connector;

wherein said first distance is at least about 0.4 inches;
wherein said at least one socket is on a side opposite of said at least one fourth connector;
wherein said at least one socket is in communication with said at least one fourth connector;
wherein said fourth connector is comprised of a rear panel connector;
wherein said transition board is distally spaced a second distance from said I/O board when said at least one first connector is connected to said at least one second connector;
wherein said second distance is at least about 0.4 inches;
wherein said at least I/O connector is hermetic;
wherein said at least I/O connector includes at least about 250 electrical conductors;
an enclosure capable of receiving said I/O board, said transition board and said backplane board, wherein said enclosure is comprised of a spray cooling system;
wherein said I/O board, said transition board and said backplane board are substantially parallel to one another;
at least one first auxiliary connector connected to said backplane board;
a first auxiliary board connected to said auxiliary connector;
at least one second auxiliary connector connected to said first auxiliary board;
a second auxiliary board connected to said second auxiliary connector.

40. (New) An input/output transition board system for actively transferring data between an I/O board and a backplane board, comprising:

an I/O board having at least one I/O connector and at least one first connector;
a transition board having at least one second connector connected to said at least one first connector and at least one third connector, wherein said transition board is active;
at least one electronic device connected to said transition board;
a backplane board having at least one fourth connector connected to said at least one third connector, wherein said backplane board has at least one socket capable of receiving at least one card;
wherein said I/O board, said transition board and said backplane board are substantially parallel to one another; and

an enclosure surrounding said I/O board, said transition board and said backplane board, wherein said at least one I/O connector extends through a wall of said enclosure, wherein said I/O board is at least near an inner surface of said enclosure;

wherein said transition board is distally spaced a first distance from said backplane board when said at least one fourth connector is connected to said at least one third connector;

wherein said first distance is at least about 0.4 inches;

wherein said at least one socket is on a side opposite of said at least one fourth connector;

wherein said at least one socket is in communication with said at least one fourth connector;

wherein said fourth connector is comprised of a rear panel connector;

wherein said transition board is distally spaced a second distance from said I/O board when said at least one first connector is connected to said at least one second connector;

wherein said second distance is at least about 0.4 inches;

wherein said at least I/O connector is hermetic;

wherein said at least I/O connector includes at least about 250 electrical conductors;

an enclosure capable of receiving said I/O board, said transition board and said backplane board, wherein said enclosure is comprised of a spray cooling system.